

MACHINE SERVICE BULLETIN #48

SUBJECT: Three Series Machines

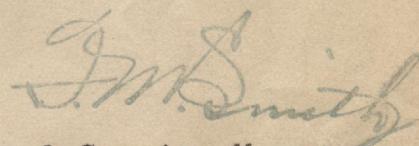
DATE: July 12, 1927

TO ALL OFFICES:

Machine Service Bulletins Nos. 24, 34 and 40, with their Supplements, furnish complete information concerning our K Model machines starting with the O-Series.

With the introduction of the 3-series machines, it is necessary to illustrate and describe that portion of the mechanism which differs from the other Models. Therefore, we are releasing herewith this information, consisting of five pages, three describing and illustrating the dismantling, reassembling and adjusting of the mechanism (Plates 1, 2 and 3), and one (Plate 4) furnishing an illustrated parts list, with an extra sheet describing the various parts and assemblies, which for the present does not include prices.

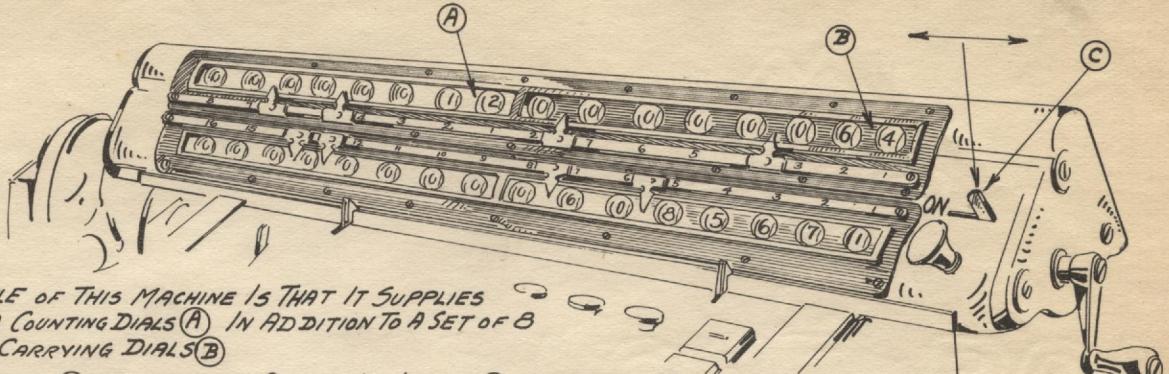
It will be noted that throughout this Bulletin we have made reference to Plates in the previous Bulletins above mentioned. As servicemen are familiar with these Bulletins and the mechanism of our other Models manufactured up to this time, we do not anticipate that there will be any difficulty in interpreting this Bulletin in the same manner as the others.



General Service Manager.

FMS:MEW

PLATE 1
MACHINE SERVICE BULLETIN NO. 48 FOR #3 SERIES MACHINES



THE PRINCIPLE OF THIS MACHINE IS THAT IT SUPPLIES A SET OF 8 COUNTING DIALS (A) IN ADDITION TO A SET OF 8 COUNTING AND CARRYING DIALS (B).

DIALS (A) AND (B) WILL BOTH CLEAR IF LEVER (C) IS PLACED TO RIGHT.
DIALS (B) WILL NOT CLEAR, BUT WILL ACCUMULATE A TOTAL OF DIALS (A) IF LEVER (C) IS PLACED TO 'ON'.

THE SERVICING OF THE ABOVE MECHANISM IS SHOWN AS FOLLOWS.

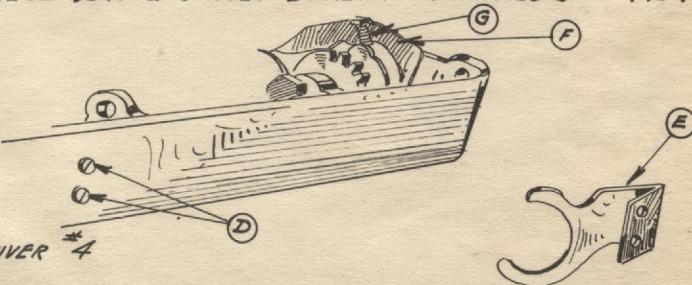
DISMANTLING —

- ① PROCEED AS SHOWN IN SERVICE BULLETIN #34 OPER #1 ② - ④ [THIS MECHANISM DOES NOT NEED OPER #3]
- ② REMOVE THE HINGE ROD AND THE CARRIAGE LIFT BAR AND LAY ASIDE. CARRIAGE IS NOW FREE OF MACHINE AND MAY BE WORKED UPON AS A UNIT.

To SERVICE THE MECHANISM IT IS NOT NECESSARY TO REMOVE THE DECIMAL BARS, LOCK LEDGE, KNOB, ETC.
IF THESE PARTS NEED SERVICE CONSULT BULLETIN #34 PLATES 5 - 12.

- ③ REMOVE SCREWS (D). BRACKET (E) MAY THEN BE EXTRACTED AND LAID ASIDE.

USE LARGE SCREW DRIVER #4



- ④ RAISE LOCKING FINGER (F) AND UNHOOK SPRING (G). SWING FINGER (F) OUT OF WAY.

- ⑤ LOOSEN THE NUTS (H) [BOTH ENDS] WITH HAMMER AND TOOL #29 AS SHOWN. WHEN LOOSE - PRY OUT THE BUSHINGS. NUTS TO REMAIN ON THE SHAFT.

IMPORTANT NOTE
BECAUSE OF AN ADJUSTMENT - BUSHINGS (K) ARE NOT INTERCHANGEABLE! LAY THEM ASIDE WITH CARE NOTING WHICH IS WHICH.

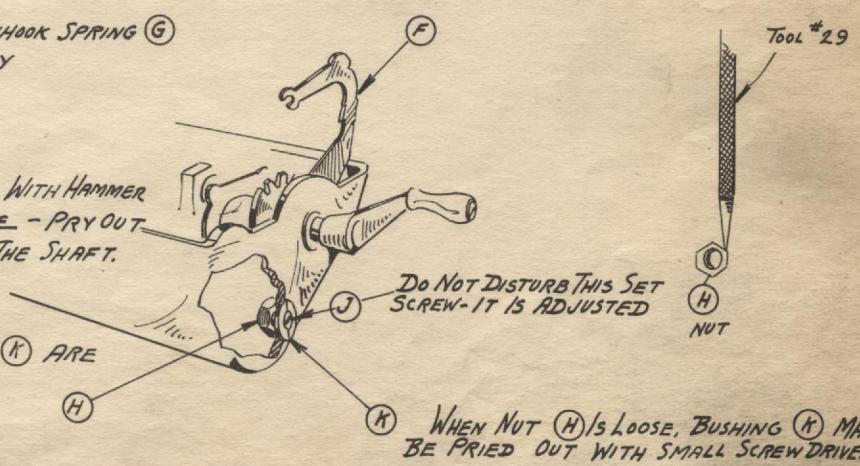


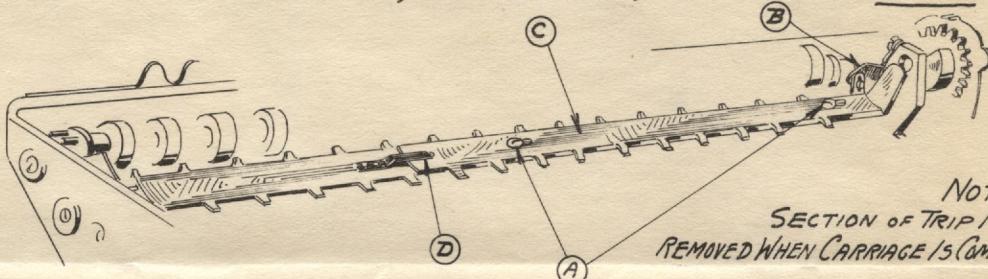
PLATE 2

DISMANTLING THE COUNTING AND CARRYING DIAL SHAFT

- 6 EXTRACT THE COUNTING AND CARRYING DIAL SHAFT AS A UNIT FROM CARRIAGE SHELL AND LAY ASIDE NUTS (H)
- 7 FOR FURTHER DISMANTLING OF THIS SHAFT SEE BULLETIN NO 34 PLATES 5 OPER 24 25 26

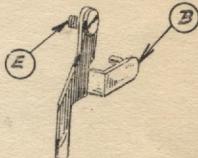
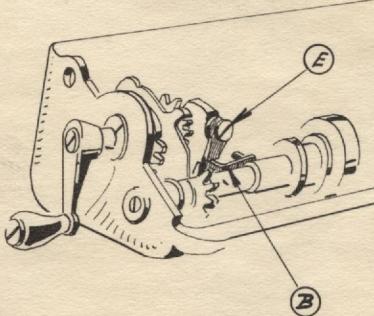
—IMPORTANT NOTE—

ALWAYS DISMANTLE THIS SHAFT, WHEN NECESSARY, FROM THE RIGHT ONLY



NOTE
SECTION OF TRIP ROD (C) MAY BE
REMOVED WHEN CARRIAGE IS COMPLETELY ASSEMBLED.

- 8 REMOVE SCREWS (A) PUSH LEVER (B) TO ON AND SECTION OF TRIP ROD (C) MAY THEN BE TAKEN OUT.
CAUTION - DO NOT BREAK FRICTION SPRING (D)



—NOTE—

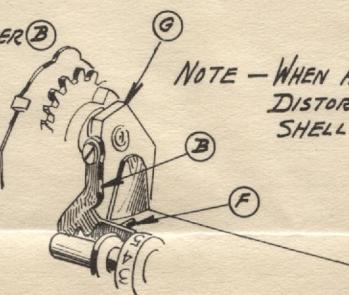
TO REMOVE PART (B) FROM AN ASSEMBLED
CARRIAGE PERFORM OPER (8) AND (9) ONLY.

- 9 REMOVE SCREW (E) AND EXTRACT LEVER (B)

NOTES ON ASSEMBLY, ADJUSTMENT AND REPAIR

- 10 ASSEMBLE LEVER (B)

AND PLACE IT AT THE 'ON' POSITION.



NOTE - WHEN ASSEMBLING LEVER (B) NOTE, FIRST THAT PIN (F) IS TIGHT AND NOT DISTORTED. ALSO DO NOT STRIP THE THREAD IN THE CARRIAGE SHELL BRACE (G)

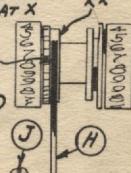
WHEN ASSEMBLED, THERE MUST BE NO BIND AND LEVER (B)
MUST MOVE FREELY

- 11 WITH LEVER (B) IN 'ON' POSITION, ASSEMBLE THE SECTION OF TRIP ROD PREVIOUSLY REMOVED, AND INSERT SCREWS (A) ABOVE. BE CAREFUL AND DO NOT STRIP THE THREADS. DO NOT ALLOW A BIND UNDER THE SCREWS (A). OIL THE SLIDE IN THE SCREW SLOTS.

- 12 FOR ADJUSTMENT AND ASSEMBLY NOTES ON THE COUNTING AND CARRYING DIAL SHAFT SEE BULLETIN #34 PLATE-6-7
OPER #27 - 28

—NOTE—

SUPPORT BRACKET MUST LOCATE FAR ENOUGH TO THE RIGHT OF FLANGE XX
TO PERMIT A SAFE CLEARANCE AT X
OTHERWISE IT MAY INTERFERE WITH COUNTING DIAL GEAR.



- 13 HOOK SPRING UPON LOCKING FINGER.

- 14 ASSEMBLE THE DIAL SHAFT SUPPORT BRACKET (H) AS SHOWN - THERE MUST BE NO BIND IN ITS BEARING.
INSERT SCREWS SECURELY

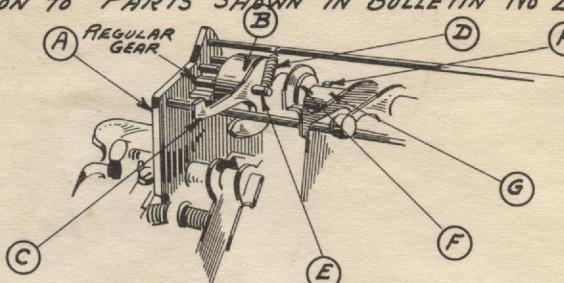
PLATE 3

NOTES ON DISMANTLING AND ASSEMBLING THE ECCENTRIC GEAR SHAFT SECTION.

BELOW ARE SHOWN THE PARTS THAT OPERATE THE COUNTING DIALS AND THEIR RELATION TO PARTS SHOWN IN BULLETIN NO 24

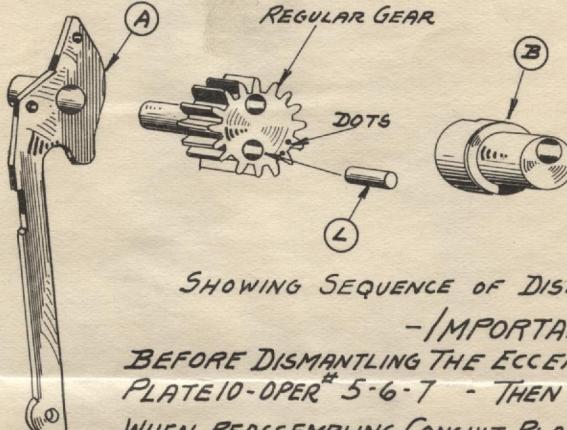
PLATE 4 - FIG. 20

PLATE 5 - FIG. 24

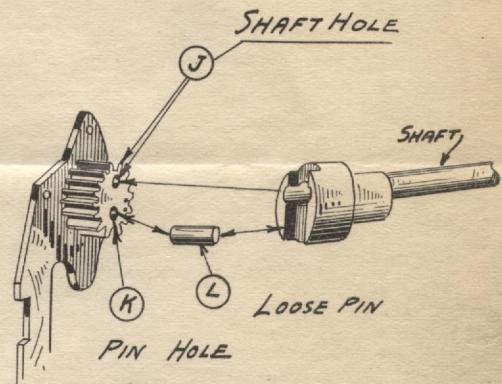


LIST OF NEW PARTS

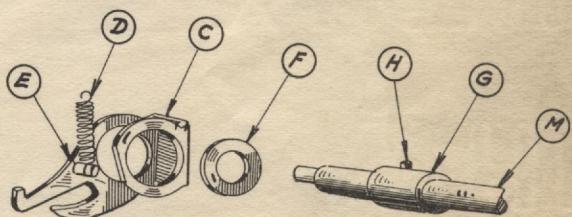
- (A) LEFT HAND ECCENTRIC GEAR BRACKET
- (B) ECCENTRIC COLLAR FOR #3 COUNTING FINGER.
- (C) COUNTING FINGER.
- (D) SPRING FOR COUNTING FINGER.
- (E) PIN FOR SPRING.
- (F) WASHER
- (G) SPACING COLLAR.
- (H) PIN IN COLLAR
- (L) DRIVING PIN FOR ECCENTRIC COLLAR.



- NOTE -



IT IS IMPORTANT THAT PIN HOLE (K) RECEIVE THE PIN (L) AND NOT THE ECCENTRIC GEAR SHAFT.
(HOLE (K) IS THE ONE NEAREST THE DOTS)



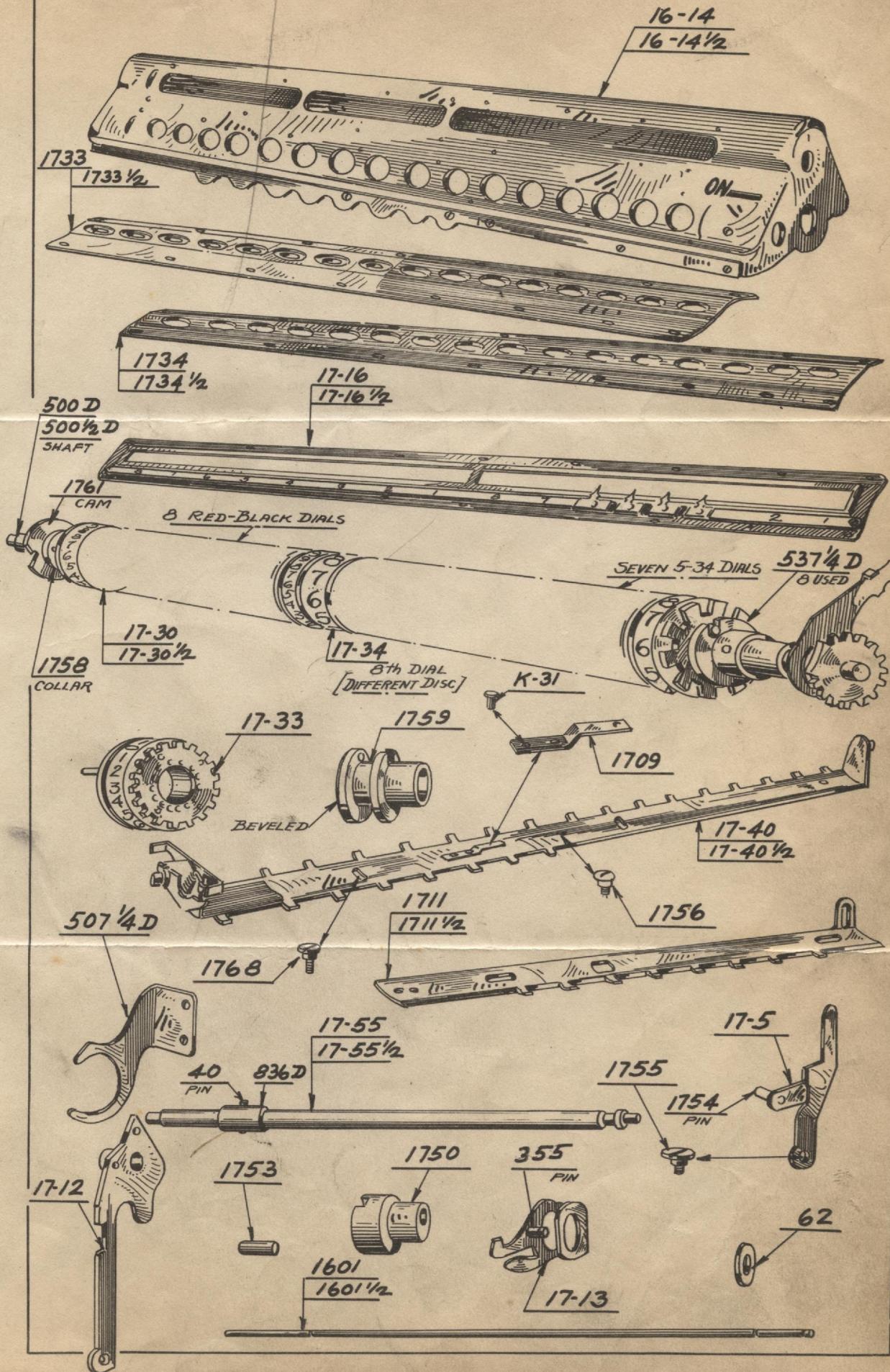
SHOWING SEQUENCE OF DISMANTLING OR ASSEMBLING

- IMPORTANT NOTE -

BEFORE DISMANTLING THE ECCENTRIC GEAR SHAFT CONSULT BULLETIN NO. 24 PLATE 10-OPER #5-6-7 - THEN BEGIN BY REMOVING PART (A) ETC.
WHEN REASSEMBLING CONSULT PLATE 5 - FIG. 24-25-27 - PLATE 6 FIG. 28-31-32

- (15) ASSEMBLE THE CARRIAGE TO THE MACHINE - CONSULT BULLETIN NO. 24 PLATE 6 - FIG. 29.
AND BULLETIN NO. 34 PLATE 72 - OPER #405
- (16) ADJUST THE COUNTING FINGER TO THE COUNTING DIALS. - SEE BULLETIN NO. 24 PLATE 7 FIG. 35-37
- (17) REPLACE WINDOW PARTS.

LIST OF NEW PARTS AND ASSEMBLIES PLATE 4
IN NO. 3 SERIES MACHINES.



PICTURED V. L. M.
SINCE 1885

PART AND ASSEMBLY LIST OF K MODEL
"3" SERIES MACHINES

Part No.	Name	Quan. per Machine		Shown on Plate No.
		16	20	
1601	Camming and Spring Shaft (16 Pl.)	2		4
1601 $\frac{1}{2}$	Camming and Spring Shaft (20 Pl.)		2	4
1709	Locating Spring for Sliding Trip Bar	1	1	4
1711	Sliding Trip Bar (16 Pl.)	1		4
1711 $\frac{1}{2}$	Sliding Trip Bar (20 Pl.)		1	4
1733	Backing Plate for Counting Dial Window Frame (16 Pl.)	1		4
1733 $\frac{1}{2}$	Backing Plate for Counting Dial Window Frame (20 Pl.)		1	4
1734	Backing Plate for Registering Dial Window Frame (16 Pl.)	1		4
1734 $\frac{1}{2}$	Backing Plate for Registering Dial Window Frame (20 Pl.)		1	4
1750	Eccentric for "3" Series Counting Finger	1	1	4
1753	Driving Pin for "3" Series Eccentric	1	1	4
1754	Pin on 1708 to operate 1711	1	1	4
1755	Pivot Screw for Sliding Trip Bar Lever	1	1	4
1756	Screw for Sliding Trip Bar	2	2	4
1758	L. H. End Collar on Counting Dial Shaft	1	1	4
1759	Counting Dial Collar (L. H. Group)	8	10	4
1761	Trip Rod Cam on Counting Dial Shaft	1	1	4
1768	Screw for "3" Series Trip Bar	2	2	4

Assembly No.

16-100	Carriage. Complete (16 Pl.)	1		1
16-100 $\frac{1}{2}$	Carriage. Complete (20 Pl.)	1	1	
16-14	Carriage Case (16 Pl.)	1		4
16-14 $\frac{1}{2}$	Carriage Case (20 Pl.)		1	
17-100A	Keyboard. Complete (Automatic 16 Pl.)	1		
17-100 $\frac{1}{2}$ A	Keyboard. Complete (Automatic 20 Pl.)		1	
17-100	Keyboard. Complete (Hand 16 Pl.)	1		
17-100 $\frac{1}{2}$	Keyboard. Complete (Hand 20 Pl.)		1	
17-5	Lever for Sliding Trip Bar	1	1	4
17-10	Top Keyboard Plate (Hand 16 Pl.)	1		
17-10 $\frac{1}{2}$	Top Keyboard Plate (Hand 20 Pl.)		1	
17-10A	Top Keyboard Plate (Automatic 16 Pl.)	1		
17-10 $\frac{1}{2}$ A	Top Keyboard Plate (Automatic 20 Pl.)		1	
17-12	L. H. Bracket for Eccentric Shaft	1	1	4
17-13	Counting Finger	1	1	4
17-16	Window Frame for Counting Dials (16 Pl.)	1		4
17-16 $\frac{1}{2}$	Window Frame for Counting Dials (20 Pl.)		1	4
17-30	Counting Dial Shaft (16 Pl.)	1		4
17-30 $\frac{1}{2}$	Counting Dial Shaft (20 Pl.)		1	4
17-33	"3" Series Counting Dial	8	10	4
17-34	Last Carrying Counting Dial	1	1	4
17-40	Trip Bar (16 Pl.)	1		4
17-40 $\frac{1}{2}$	Trip Bar (20 Pl.)		1	4
17-55	Eccentric Shaft and Collar (16 Pl.)	1		4
17-55 $\frac{1}{2}$	Eccentric Shaft and Collar (20 Pl.)		1	4

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